

Army's New Protective/Combat Eyewear

By Mr. Larry T. Hasty

Eye injuries account for 16 percent of all coalition casualties in Iraq, but reports from coalition Soldiers indicate that the US Army's new protective eyewear has protected their eyes from shrapnel time and time again. Soldiers in training and in combat run a high risk of losing their eyesight. Flying shrapnel is the most dangerous threat to our Soldiers' eyes, but many other hazards—sand, dust, debris from helicopters and high winds, flash fires, and lasers—also pose significant threats to our Soldiers' eyes.

During the past few years, the US Army has adopted several new types of commercial protective eyewear. Until recently, the choice was limited to the old sun, wind, and dust goggles (SWDG); the ballistic/laser protective spectacles (BLPS); and the special protective eyewear cylindrical system (SPECS). New eyewear choices (that have passed the Army's testing criteria) are now available as commercial, off-the-shelf items. These items are currently being issued to deploying Soldiers through the Army's rapid-fielding initiative (RFI). Units can purchase these items through the normal supply channels. The new eyewear is divided into two categories—spectacles and goggles.

According to test criteria, spectacles are required to stop a 5.8-grain fragment simulating a projectile traveling at 640 feet per second. Goggles must stop a 17-grain fragment simulating a projectile traveling at 550 feet per second (approximately twice the energy impact as the spectacles must stop). Although some of the approved spectacles may also meet the goggles requirement, Soldiers performing missions on board their combat platforms should choose from the list of approved goggles to provide the appropriate level of fragmentation protection, as well as added sun, wind, and dust protection. An updated authorized protective eyewear list, published by the Program Manager-Clothing and Individual Equipment (PM-CIE), provides information on how to order the new eyewear at <https://peosoldier.army.mil/index.asp?section=product>. The list is located directly below the "Army Combat Uniform" graphic on the upper right-hand side of the page.

Although these new commercial items provide excellent ballistic protection, none of them protect eyes from lasers. If an operation or training mission requires eye protection from lasers, Soldiers must still wear the SWDG, BLPS, or SPECS with laser lens. For Soldiers requiring prescription spectacles, the Uvex XC™ spectacle with a prescription lens carrier (PLC), the Eye System Safety (ESS) Interchangeable Component Eyeshield (ICE) 2™ spectacle with PLC, and the Revision Sawfly™ spectacle with PLC are authorized for use as alternatives to the BLPS.

The ESS Land Operations™ goggles can be worn by Soldiers who need prescription eyeglasses, as well as those who do not. The goggles will fit over Army-issued eyeglasses. The kit includes a rubber frame with foam backing to wick away moisture and increase comfort for long periods of use. Foam-covered vent holes in the frame of the goggles allow ventilation and help eliminate fogging, while keeping out dust. The kit includes an anti-reflective sleeve that reduces glint when the goggles are not in use. One size fits all.



ESS Land Operations Goggles

The ESS Profile NVG™ (night-vision goggles) are strictly for Soldiers who do not need eyeglasses. These goggles fit closer to the face and are more compatible with night-vision devices. The kit can be ordered in one of three frame colors—black, olive drab, or desert tan. The backing of the goggles is made of rubber, which allows a closer fit to the face. A thin fleece backing for these goggles, which may improve comfort in very cold weather, is being evaluated at Fort Knox. Foam-covered vent holes in the frame of the goggles allow ventilation and help eliminate fogging, while keeping out dust. Outrigger clips on the strap allow for optimal helmet compatibility without breaking the face seal. An antireflective sleeve reduces glint when the goggles are not in use. One size fits all.

The ESS Vehicle Operations™ goggles are designed for Soldiers exposed to excessive airborne debris when operating vehicles at high speeds. The goggles will fit over most eyeglasses. The high-density, restricted-perimeter filtration provides protection against airborne debris, and the goggles are used for vehicle operations involving excessive dust. The frame has a foam backing that also wicks away moisture. It also comes with the antireflective sleeve that reduces glint when the goggles are not in use. One size fits all.

The Arena FlakJak™ goggles are designed for Soldiers who do not wear eyeglasses. The frame has a foam backing that fits to the face and also wicks away moisture. These goggles have a molded frame with a ventilation screen, which allows air to flow through to minimize lens fogging. They also have an antireflective sleeve to reduce glint when the goggles are not in use. One size fits all.

All goggle kits come with two ballistic protective lenses, one clear and one tinted. These lenses are made with antiscratch and antifogging coatings. Both types of lenses protect the eye from ultraviolet rays.

During training and combat, Soldiers run the risk of losing their eyesight, which is a powerful argument for wearing protective eyewear. Units may order the authorized commercial eyewear with the national stock number (NSN) by submitting funded military standard requisitioning and issue procedures (MILSTRIP) requisitions through normal supply channels to the Defense Supply Center Philadelphia General and Industrial.



ESS Profile NVG



ESS Vehicle Operations Goggles



Arena FlakJak Goggles